





UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	TILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/069,496	•	02/14/2002	Peter Van Hullen	VAN HULLEN-I PCT	3228
25889	7590	04/21/2004		EXAMINER	
WILLIAM	COLLA	RD	CABRERA, ZOILA E		
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576				ART UNIT	PAPER NUMBER
				2125	<i>i</i> —
				DATE MAILED: 04/21/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		pne
	Application	Applicant(s)
Office Action Summers	10/069,496	VAN HULLEN, PETER
Office Action Summary	Examiner	Art Unit
The MAN INC DATE of this communication and	Zoila E. Cabrera	2125
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	rely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).
Status		
<ul> <li>1) Responsive to communication(s) filed on 14 Fe</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 7-13 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 7-13 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.	
Application Papers		
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction of the order of the orde	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage
Attachment(s)		
1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3</u> .	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	



Application/Control Number: 10/069,496

Art Unit: 2125

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. (US 5,379,237) in view of Takada (US 6,266,983).

Regarding claims 7, 10-11, **Morgan** discloses a method for making material defects in/on rod-shaped rolled material upon exiting from the finishing rolling stand (Col. 6, lines 5-17 and lines 28-31 please note that the tester A and marker 17 may be placed at any location of the manufacturing line; Fig. 1), in which the flawed spots are detected in the course of the rolling process (Abstract, lines 4-11) said information is supplied to a computer (Fig. 2A, element 46), the defective spots are identified and stored by the computer according to the type of defect and the location (Col. 7, lines 60-65), and the computer controls a marking device with the help of said data in such a way that the rod-shaped, finished material is marked in the site determined by the computer according to the respective type of defect (Col. 7, lines 60-65; Col. 6, lines 47-49; Fig. 2A, element 17).

 the marking takes place directly on the hot rolled material prior to the cutting to cooling bed lengths (Fig. 1, element 20; Fig. 2A element A and 17; Col. 6, lines 21-28);



Application/Control Number: 10/069,496

Art Unit: 2125

• the marking takes place after the cutting to cooling bed lengths prior to/after the cutting to the length specified by the customer (Fig. 1, element 17).

Morgan discloses an automated system for controlling the quality of regularly shaped products during their manufacture including a marking station. However, Morgan does not disclose the use of ultrasound testing and/or inductive testing. But Takada discloses the use of ultrasound testing (Col. 15, lines 41-43; Abstract, lines 1-6). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of Morgan with Takada because it would provide continuous and high-reliability detection of flaws in a strip (Takada, Col. 6, lines 10-12) by using an ultrasonic testing apparatus for detecting internal flaws (Col. 6, lines 22-24).

2. Claims 8-9 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan et al. and Takada as applied to claim 7 above and further in view of Hoffman et al. (US 3,673,493).

Morgan et al. and Takada disclose the limitations of claim 7 above but fail to disclose the limitations of claims 8-9 and 12-13. However, Hoffman discloses such limitations as follows:

 the defect evaluation or defect detection and the marking command take place only at the beginning of the material test after preset period of time depending on the final rolling speed (Col. 7, lines 7-12);



Application/Control Number: 10/069,496

**Art Unit: 2125** 

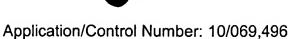
- the detected individual defects are summed up in the course of a preset period of time and the marking command is triggered only after a defined defect relevance level has been reached (Col. 7, lines 54-58; Fig. 2; Col. 7, lines 1-12);
- the marking is only a virtual marking carried out and stored by the computer program (Col. 1, lines 51-55);
- an automatic sorting out is carried out based on the marking by means of electronic or optical detection of the marking (Col. 1, lines 68-73).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the teachings of **Morgan** and **Takada** with the system of **Hoffman** because it would provide a highly sensitive defect detecting means which includes a probe adapted to scan a surface of the test member cyclically and further would provide differential comparators that classify the defects according to first and second level of defect severity (**Hoffman**, Col. 1, lines 63-70).

## Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (703) 306-4768. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).



Art Unit: 2125

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (703) 308-0538. Additionally, the fax phones for Art Unit 2125 are (703) 872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera Patent Examiner 4/16/04

LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100